

CLAIMS

What is claimed is:

[c01] In an intelligent switched telephone network having a plurality of Advanced Intelligent Network (AIN) components, a method for providing a usage pattern for a customer of a telecommunications system, the usage pattern providing historical information concerning the customer's use of the telecommunications system, the method comprising:

communicating with a data network and receiving a query for the customer's usage pattern, the query originating from the customer using a computer device operating on the data network;

acquiring the usage pattern from a database communicating with a service control point; and

causing the usage pattern to be communicated along the data network to the computer device,

whereby the customer uses the computer device to access the usage pattern.

[c02] A method for providing a usage pattern according to claim 1, wherein the step of acquiring the usage pattern comprises at least one of i) acquiring the usage pattern from a service control point operating on the telecommunications system and ii) acquiring the usage pattern from a database operating on the data network.

[c03] A method for providing a usage pattern according to claim 1, wherein the step of acquiring the usage pattern comprises at least one of i) acquiring the number of telephone calls made by the customer and ii) acquiring the number of telephone calls received by the customer.

- | Year | Area | Population | Area | Population | Area | Population | Area | Population | Area | Population |
|------|------|------------|-------|------------|------|------------|------|------------|------|------------|
| 1970 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1971 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1972 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1973 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1974 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1975 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1976 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1977 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1978 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1979 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1980 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1981 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1982 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1983 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1984 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1985 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1986 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1987 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1988 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1989 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1990 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1991 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1992 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1993 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1994 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1995 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1996 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1997 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1998 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1999 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2000 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2001 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2002 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2003 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2004 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2005 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2006 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2007 | 100 | 100 | 100</ | | | | | | | |

made during a chronological interval, ii) total number of calls made during a calendar interval, and iii) total number of calls made during a billing cycle.

[c10] A method for providing a usage pattern according to claim 1, wherein the step of acquiring the usage pattern comprises acquiring at least one of i) total number of calls received during a chronological interval, ii) total number of calls received during a calendar interval, and iii) total number of calls received during a billing cycle.

[c11] A method for providing a usage pattern according to claim 1, wherein the step of acquiring the usage pattern comprises acquiring at least one of i) billing information concerning a call made by the customer and ii) billing information concerning a call received by the customer.

[c12] A method for providing a usage pattern according to claim 1, wherein the step of acquiring the usage pattern comprises acquiring information concerning unused minutes remaining in a billing cycle.

[c13] A method for providing a usage pattern according to claim 1, further comprising verifying an identity of the customer to help ensure privacy of the usage pattern.

[c14] A method for providing a usage pattern for a subscriber of a telecommunications system, the usage pattern providing information concerning the subscriber's use of the telecommunications system, the method comprising:

communicating with a data network and receiving a query for the customer's usage pattern, the query originating from the customer using a computer device operating on the data network;

verifying an identity of the customer to help ensure privacy of the usage pattern;

acquiring the usage pattern, the usage pattern comprising at least one of

the number of telephone calls made by the customer during a billing cycle,
the number of telephone calls received by the customer during the billing
cycle,

telephone numbers called by the customer during the billing cycle,
telephone numbers calling the customer during the billing cycle,
date of each telephone call made by the customer during the billing cycle,
time of each telephone call made by the customer during the billing cycle,
duration of each telephone call made by the customer during the billing
cycle,

identity of a calling party terminating a call before the customer answers
the call, and

the number of unused minutes remaining in the billing cycle; and
causing the usage pattern to be communicated along the data network to the
computer device,

whereby the customer uses the computer device to access the usage pattern.

[c15] In an intelligent switched telephone network having a plurality of Advanced Intelligent Network (AIN) components, a method for providing a usage pattern for a customer of a telecommunications system, the usage pattern providing historical information concerning the customer's use of the telecommunications system, the method comprising:

receiving a query for the usage pattern, the query originating from a device communicating with the telecommunications system;

causing the telecommunications system to acquire the usage pattern from at least one of i) a service control point and ii) a data network, the service control point operating on the telecommunications system and comprising the usage pattern for the customer, the data network communicating with the service control point and also comprising the usage pattern for the customer; and

causing the usage pattern to be routed along the telecommunications system to the device,

whereby the customer uses the device to access the usage pattern.

- [c16] A method for providing a usage pattern according to claim 15, further comprising causing the usage pattern to be communicated from the data network to the telecommunications system.
- [c17] A method for providing a usage pattern according to claim 15, wherein the step of receiving a query for the usage pattern comprises receiving the query from at least one of i) a wireless personal digital assistant communicating with the telecommunications system, ii) a wireless mobile telephone communicating with the telecommunications system, iii) a wireless pager communicating with the telecommunications system iv) and a wireless computer device communicating with the telecommunications system.
- [c18] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating at least one of i) the number of telephone calls made by the customer and ii) the number of telephone calls received by the customer.
- [c19] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating at least one of i) a telephone number called by the customer, ii) a name of a party called by the customer and iii) an address of the party called by the customer.
- [c20] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating at least one of i) a

telephone number of a party placing a call to the customer, ii) a name of a calling party, and iii) an address of the calling party.

- [c21] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating information concerning at least one of i) a date of a telephone call made by the customer, ii) a time the telephone call was made by the customer, iii) a duration of the telephone call, and iv) information identifying the called party.
- [c22] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating information concerning at least one of i) a date of a telephone call received by the customer, ii) a time the telephone call was received by the customer, iii) a duration of the telephone call, and iv) information identifying the calling party.
- [c23] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating information concerning the identity of a calling party terminating a telephone call before the customer answers the telephone call.
- [c24] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating at least one of i) total number of calls made during a chronological interval, ii) total number of calls made during a calendar interval, and iii) total number of calls made during a billing cycle.
- [c25] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating at least one of i) total number of calls received during a chronological interval, ii) total number of calls received during a calendar interval, and iii) total number of calls received during a billing cycle.

[c26] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating at least one of i) billing information concerning a call made by the customer and ii) billing information concerning a call received by the customer.

[c27] A method for providing a usage pattern according to claim 15, wherein the step of causing the usage pattern to be routed comprises communicating information concerning unused minutes remaining in a billing cycle.

[c28] A method for providing a usage pattern according to claim 15, further comprising verifying an identity of the customer to help ensure privacy of the usage pattern.

[c29] A method for providing a usage pattern for a customer of a telecommunications system, the usage pattern providing historical information concerning the customer's use of the telecommunications system, the method comprising:

receiving a query for the usage pattern, the query originating from a device communicating with the telecommunications system;

verifying an identity of the customer to help ensure privacy of the usage pattern;

causing the telecommunications system to acquire the usage pattern for the customer, the usage pattern comprising at least one of

the number of telephone calls made by the customer during a billing cycle,
the number of telephone calls received by the customer during the billing cycle,
telephone numbers called by the customer during the billing cycle,
telephone numbers calling the customer during the billing cycle,
date of each telephone call made by the customer during the billing cycle,
time of each telephone call made by the customer during the billing cycle,
duration of each telephone call made by the customer during the billing cycle,

identity of a calling party terminating a call before the customer answers the call, and

the number of unused minutes remaining in the billing cycle; and
causing the usage pattern to be routed along the telecommunications system to the device,

whereby the customer uses the device to access the usage pattern.

[c30] A method of acquiring a usage pattern for a customer of a telecommunications system, the usage pattern providing historical information concerning the customer's use of the telecommunications system, the method comprising:

acquiring the usage pattern from at least one of i) the telecommunications system and ii) a data network, the usage pattern comprising at least one of

the number of telephone calls made by the customer during a billing cycle,
the number of telephone calls received by the customer during the billing cycle,

telephone numbers called by the customer during the billing cycle,
telephone numbers calling the customer during the billing cycle,
date of each telephone call made by the customer during the billing cycle,
time of each telephone call made by the customer during the billing cycle,
duration of each telephone call made by the customer during the billing cycle,
identity of a calling party terminating a call before the customer answers the call, and

the number of unused minutes remaining in the billing cycle; and
displaying the acquired usage pattern via a user interface on a device.

- [c31] A method of acquiring a usage pattern according to claim 30, wherein the step of displaying the acquired usage pattern comprises displaying the acquired usage pattern via a user interface on a device coupled to the telecommunications system.
- [c32] A method of acquiring a usage pattern according to claim 30, wherein the step of displaying the acquired usage pattern comprises displaying the acquired usage pattern via a user interface on a wireless communication device coupled to the telecommunications system.
- [c33] A method of acquiring a usage pattern according to claim 30, wherein the step of displaying the acquired usage pattern comprises displaying the acquired usage pattern via a user interface on a device coupled to the data network.
- [c34] A system for providing a usage pattern for a customer of a telecommunications system, the usage pattern providing historical information concerning the customer's use of the telecommunications system, the system comprising:
- a database of usage patterns, each usage pattern comprising at least one of
 - the number of telephone calls made by the customer during a billing cycle,
 - the number of telephone calls received by the customer during the billing cycle,
 - telephone numbers called by the customer during the billing cycle,
 - telephone numbers calling the customer during the billing cycle,
 - date of each telephone call made by the customer during the billing cycle,
 - time of each telephone call made by the customer during the billing cycle,
 - duration of each telephone call made by the customer during the billing cycle,
 - identity of a calling party terminating a call before the customer answers the call, and
 - the number of unused minutes remaining in the billing cycle; and

a processor accessing the database of usage patterns and acquiring the usage pattern.

[c35] A public switched telephone network for processing a telephone call, comprising the following Advanced Intelligent Network (AIN) component:

a Service Control Point processing system for providing usage pattern service to a subscriber, the Service Control Point processing system comprising a processor accessing a database of usage patterns, each usage pattern comprising at least one of i) the number of telephone calls made by the customer during a billing cycle, ii) the number of telephone calls received by the customer during the billing cycle, iii) telephone numbers called by the customer during the billing cycle, iv) telephone numbers calling the customer during the billing cycle, v) date of each telephone call made by the customer during the billing cycle, vi) time of each telephone call made by the customer during the billing cycle, vii) duration of each telephone call made by the customer during the billing cycle, viii) identity of a calling party terminating a call before the customer answers the call, and ix) the number of unused minutes remaining in the billing cycle.

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